

NOTE ON THE GENUS *APHRITIS*, C.V.

By J. DOUGLAS OGILBY.

The genus *Aphritis* was established in 1831 by Cuvier and Valenciennes* for the reception of a small fish which had been obtained in the "fresh waters of Van Diemen's Land" by the naturalists attached to the *Astrolabe*, and received the name *urvillii* in honour of the commander of the expedition.

The genus remained monotypic until 1842, in which year Jenyns† described two fishes under the names of *A. undulatus* and *A. porosus*, from the Chonos Archipelago and the coast of Patagonia respectively; these fishes Günther‡ in 1860, with some hesitation, associated with *A. urvillii*.

In the following year, however, the same author described,§ without in any way questioning its generic affinity, a third and very distinct South American species to which he gave the specific name *gobio*, the diagnosis being drawn up from a dried specimen brought to England by Capt. King from Port Famine, Straits of Magelhaen, whence others were subsequently obtained by the naturalists of the *Challenger*.

Finally in 1872 Castelnau|| received from Bass' Straits a fish between which and *A. urvillii* he professed to find such important differences as to warrant not only specific but generic recognition, and on which, acting on this belief, he therefore bestowed the name *Pseudaphritis bassii*. Writing in 1890 I redescribed¶ this fish from a New South Wales example, and pointed out that the

* Hist. Nat. Poiss. viii. p. 483, 1831.

† Voy. Beagle, Fish. iii. pp. 160-162, 1842.

‡ Catal. Fish. ii. p. 243, 1860.

§ Ann. & Mag. Nat. Hist. (3) vii. 1861, p. 88.

|| Proc. Zool. & Acclim. Soc. Vict. i. 1872, p. 92.

¶ Rec. Austr. Mus. i. 1890, pp. 67-69.

species could not be generically separated from *A. urvillii*, rejecting in fact Castelnau's genus while allowing his species.

At the date of this last paper there were therefore five species, two Australian and three American, united together under the common name *Aphritis*, namely:—*A. urvillii*, C.V.; *A. undulatus*. Jen; *A. porosus*, Jen.; *A. gobio*, Gnth.; and *A. bassii* (Cast.), Ogil.

In my paper on "*Pseudaphritis bassii*, Casteln.," quoted above, the following paragraph will be found on p. 68:—"In the 'Zoological Record' for 1872 Dr. Günther remarks: '*Aphritis dumerili*. To this species appears to belong *Pseudaphritis bassii*' As I am unable to find any description of the former species, I am not in a position to verify or contravene this supposition." The same difficulty still remains, but it has occurred to me that '*dumerili*' may be a misprint or *lapsus calami* for '*durvillii*,' by which name Günther erroneously alludes to Cuvier and Valenciennes' species elsewhere (A.N.H. l c.)

A careful study of the characters of these fishes shows that their association in a single genus is unwarranted, and that not only are Jenyns' two species generically separable from that of Cuvier and Valenciennes, but that Günther's *gobio* must be removed from both; necessitating therefore the division of the heterogeneous *Aphritis* of the latter author into no less than three distinct genera.

It now remains only to determine by what names these genera with their accompanying species should be known.

The first author to detect the generic differences between the fish described by Cuvier and Valenciennes and those named by Jenyns was Gill, who, so long ago as 1861, appended to his "Synopsis of the Notothenioids" a note in which he remarks:—"Two species (*Aphritis undulatus* and *A. porosus*), referred by Jenyns to the genus *Aphritis*, not only are generically distinct, but belong to a different family, and form a genus nearly related to *Elginus*, which will be at an early date described as *Elginops*."*

* Proc. Acad. Nat. Sc. Philad. 1861, p. 522.

Thirty years later the same author writes as follows* :—" On subsequently endeavouring to diagnose *Eleginops*, the author became convinced that there was no generic difference between it and *Eleginus*, and that the two nominal species were probably the young of the typical *Eleginus*."

In the same paper Gill demonstrates that the generic name *Eleginus*, Cuv. & Val. 1830, was anticipated by Fischer, who, in 1813, proposed it for the accommodation of the *Gadus navaga* of Kölreuter, giving an excellent generic diagnosis accompanied by a good figure of the fish. This of course necessitates the suppression of the name *Eleginus* as applied to the notothenioid genus, for which, however, *Eleginops*, Gill, may conveniently be retained, though I am not aware that the genus has ever been properly characterised by that author.

Having now provided a suitable generic name for the two South American species described by Jenyns, it devolves on us to determine by what name our Australian fishes should be designated.

None of the authors above referred to appear to have been aware that twenty-seven years previous to its use by Cuvier and Valenciennes the term *Aphritis* had been employed by Latreille† as a name for a genus of dipterous insects, and is consequently inadmissible when applied to a fish.

To further complicate the already sufficiently confused synonymy of these fishes Berg,‡ recognising the invalidity of *Aphritis*, proposes to rename the notothenioid genus *Phricus*, and catalogues one of Jenyns' species as *Phricus porosus*, while acknowledging the correctness of Gill's conclusions by allotting the former author's *Aphritis undulatus* to a place in the synonymy of *Eleginus maclovinus*. But since Berg does not recognise the generic difference between *Aphritis urvillii* and *Phricus porosus*,

* Proc. U.S. Nat. Mus. xiv. 1891, p. 305.

† Nouv. Dict. d'Hist. Nat. ii. p. 231, 1804.

‡ Ann. Mus. Buenos Aires, iv. 1895, p. 65.

distinctly stating that his *nomen novum* is proposed "in exchange for Cuvier's generic name," it is evident that *Phricus* must sink into a synonym of our fish for which Castelnau's prior genus *Pseudaphritis* will henceforth stand, leaving without a generic name the neantarctic *porosus*, if indeed it should prove to be a good species and not, as is most probable, an immature form of *Eleginops maclovinus*.

Some months ago I received, through the kindness of Mr. Arthur Wilson, of Geelong, three fine specimens of a *Pseudaphritis* from the fresh waters of Victoria, where it is known to anglers as the "Tupong,"* and having also in my possession two examples of the Tasmanian fish, sent to me by Mr. Morton. I was enabled to institute a comparison between the insular and continental forms, and at the same time correct my generic and specific diagnoses; the result of this comparison leads me to believe that there is but one species common to the fresh waters of Tasmania and south-eastern Australia, the correct title of which is *Pseudaphritis urvillii*.

It now only remains to find a generic name for the *Aphritis gobio* of Günther, all the other species associated under that genus by the author of the British Museum Catalogue having been provided with suitable names. So far I have been unable to ascertain that any generic name has as yet been proposed for this fish, and, following my usual custom under such circumstances, I refrain from designating it, not having access to an example on which to base a diagnosis; to those, therefore, who are more fortunately situated than I—Dr. Günther for preference—the task of suggesting an appropriate name is left.

I append, however, a brief analysis of the three, probably monotypic, genera, which have at various times been associated under the inadmissible title *Aphritis*, giving as far as is possible a full generic along with a partial specific synonymy.

* Consult Hall, Geelong Naturalist, v. No. 4, pp. 5-6, 1896.

ELEGINOPS.

Eleginus (not Fischer*) Cuvier & Valenciennes, Hist. Nat. Poiss. v. p. 158, 1830; Günth. Catal. Fish. ii. p. 247, 1860.

Eleginops, Gill, Proc. Acad. Nat. Sc. Philad. 1861, p. 522, and Proc. U.S. Nat. Mus. xiv. 1891, p. 305 (to replace *Eleginus*, C. V.)

Head somewhat compressed, not elevated, the snout short; mouth small, the maxillary slender and scarcely extending to the vertical from the anterior border of the eye; upper jaw the longer; no palatine teeth; opercle spineless; gill-membranes attached to the isthmus; dorsal fins well separated, of moderate height, the first originating above the insertion of the pectorals; dorsal rays simple or feebly branched; anal with a single spine, originating well behind the second dorsal; lower pectoral rays branched; scales ciliated; head and body without cutaneous appendages.

Type:—*ELEGINOPS MACLOVINUS*.

= *Eleginus maclovinus*, Cuv. & Val. 1830, = *Atherina macloviana*, Less. 1830, = *Eleginus chilensis*, Cuv. & Val. 1833, = *Aphritis undulatus*, Jenyns, 1842? = *Eleginus falklandicus*, Richards. 1846, ? = *Aphritis porosus*, Jenyns, 1842, ? = *Phricus porosus*, Berg, 1895.

Distribution:—Marine fishes from the southern half of South America.

In Berg's excellent paper, of which previous mention has been made, this fish is catalogued by the name *Eleginus maclovinus*, and the family to which it is referred is renamed *Eleginidae*, exception being taken to Gill's *Nototheniidae* on the ground that *Eleginus* is the oldest established genus belonging to the family; but since it has been shown that *Eleginus* is unavailable, Gill's name necessarily holds good, for it will hardly be contended that, despite the change of name, the family must receive its title from the oldest recorded species. In any case I am not prepared to

* *Eleginus*, G. Fischer, Mém. Soc. Nat. Moscou, v. p. 4, 1813; type *Gadus navaqa*, Kölreuter.

admit that there is an obligation imposed upon us to arbitrarily derive the name of a family from that of the elder genus, which may not be the most widely distributed and typical association of species. Berg also, when proposing the name *Phricus*, quotes the synonymy as "*Aphritis*, Cuv. 1817." I cannot ascertain that Cuvier ever established such a genus in the earlier edition of his "Règne Animal," but even if it were so it does not affect the matter here brought forward, since Latreille's use of the name would still retain its priority.

? gen. innom.

Aphritis sp. Günther, Ann. & Mag. Nat. Hist. (3), vii. 1861, p. 88.

Head compressed and elevated, the snout long; mouth large, the maxillary wide and extending to the vertical from the middle of the eye; lower jaw somewhat prominent;* palatine teeth present; opercle with a spine; gill-membranes? † Dorsal fins contiguous, elevated, the first originating well in advance of the insertion of the pectorals; dorsal rays simple; anal without spine, originating well behind the second dorsal; lower pectoral rays simple; scales cycloid; an orbital tentacle; sides of body with cutaneous appendages.

Type:—*Aphritis gobio*, Günther, Ann. & Mag. Nat. Hist. (3) vii. 1861, p. 88.

Distribution:—Marine fishes from the Straits of Magelhaen.

PSEUDAPHRITIS.

Aphritis (not Latreille) Cuvier & Valenciennes, Hist. Nat. Poiss. viii. p. 483, 1831; Günther, Catal. Fish. ii. p. 24, 1860.

* According to the letterpress of Günther's earlier description; this statement is neither corrected nor corroborated in his later description (Zool. Challenger, Shore Fish. p. 21, 1880), nor in Cunningham's note (Trans. Linn. Soc. London, xxvii. p. 469, 1871), but in the Challenger figure (l.c. pl. ix.) the upper jaw is apparently considerably longer than the lower.

† Probably free from the isthmus.

Pseudaphritis, Castelnau, Proc. Zool. & Acclim. Soc. Vict. i. 1872, p. 92.

Phricus, Berg, Ann. Mus. Buenos Aires, iv. 1895, p. 65 (to replace *Aphritis*, C.V.)

Head somewhat depressed, the snout short; mouth rather small, the maxillary of moderate width and extending to or nearly to the vertical from the middle of the eye; lower jaw the longer; palatine teeth present; opercle with a feeble spine; gill-membranes free from the isthmus; dorsal fins well separated, rather low, the first originating far behind the insertion of the pectorals; dorsal rays branched; anal fin with two semidetached spines, the anterior the longer, originating well in advance of the second dorsal; lower pectoral rays simple; scales finely ctenoid; head and body without cutaneous appendages.

Type :—*PSEUDAPHRITIS URVILLII*.

= *Aphritis urvillii*, Cuv. & Val. 1831, = *Pseudaphritis bassii*, Casteln. 1872, = *Aphritis bassii*, Ogilby, 1890; ? = *Eleginus bursinus*, Cuv. & Val. 1830.

Distribution :—Fresh water fishes from south-eastern Australia and Tasmania.

If the suggestion here made, that *Eleginus bursinus** is identical with *Aphritis urvillii*, be correct, our fish will have to be called *Pseudaphritis bursinus*. *E. bursinus* was said to have been collected by Quoy and Gaimard in Port Jackson during their first voyage to the southern hemisphere in the Uranie; it has not since been recognised.

*Cuvier & Valenciennes, Hist. Nat. Poiss. v. p. 1, 1830.